FIG.1

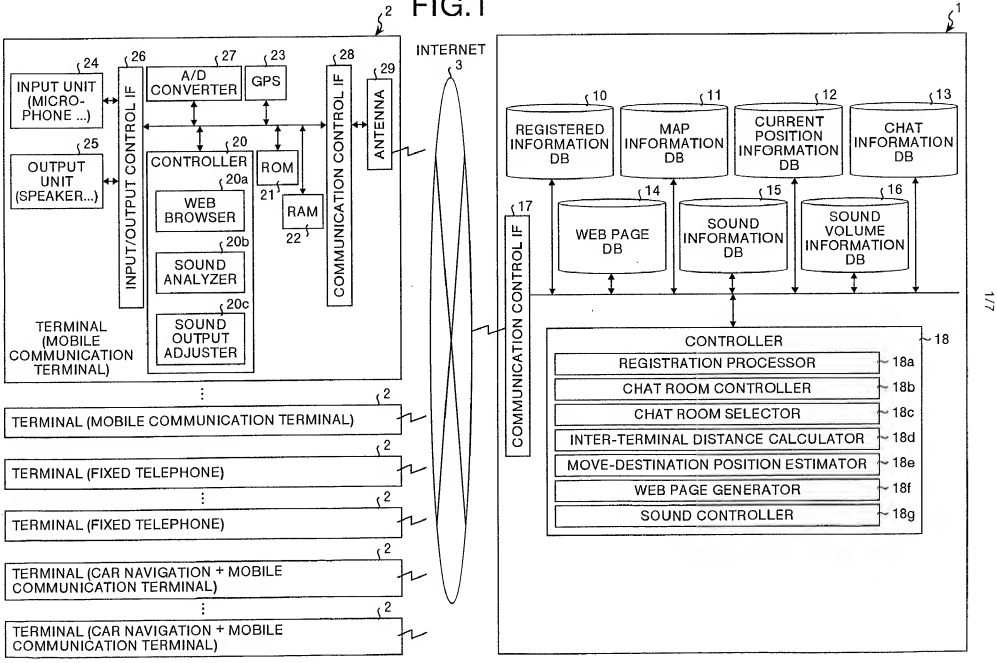

2
INPUT UNIT (MICRO-PHONE ...)
24
OUTPUT UNIT (SPEAKER...)
25
INPUT/OUTPUT CONTROL IF
26
A/D CONVERTER
27
GPS
23
CONTROLLER
20
ROM
21
RAM
22
WEB BROWSER
20a
SOUND ANALYZER
20b
SOUND OUTPUT ADJUSTER
20c
COMMUNICATION CONTROL IF
28
ANTENNA
29
TERMINAL (MOBILE COMMUNICATION TERMINAL)
INTERNET
3
TERMINAL (MOBILE COMMUNICATION TERMINAL)
TERMINAL (FIXED TELEPHONE)
TERMINAL (FIXED TELEPHONE)
TERMINAL (CAR NAVIGATION + MOBILE COMMUNICATION TERMINAL)
TERMINAL (CAR NAVIGATION + MOBILE COMMUNICATION TERMINAL)
1
REGISTERED INFORMATION DB
10
MAP INFORMATION DB
11
CURRENT POSITION INFORMATION DB
12
CHAT INFORMATION DB
13
WEB PAGE DB
14
SOUND INFORMATION DB
15
SOUND VOLUME INFORMATION DB
16
COMMUNICATION CONTROL IF
17
CONTROLLER
18
REGISTRATION PROCESSOR
18a
CHAT ROOM CONTROLLER
18b
CHAT ROOM SELECTOR
18c
INTER-TERMINAL DISTANCE CALCULATOR
18d
MOVE-DESTINATION POSITION ESTIMATOR
18e
WEB PAGE GENERATOR
18f
SOUND CONTROLLER
18g

FIG.2

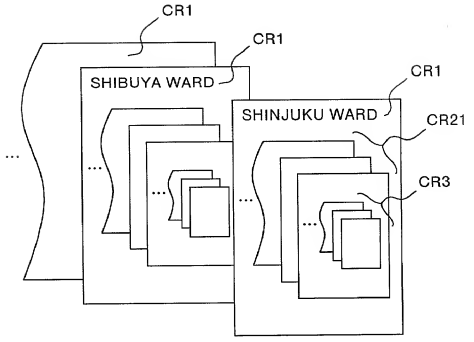



FIG.3

| USER ID | TERMINAL ID | TELEPHONE NUMBER | HANDLE NAME | SELF-INTRODUCTION CONTENTS |
|---|---|---|---|---|
| RID0001 | TID0001 | xx-xxxx-xxxx | (SOUND DATA) | (SOUND DATA) |
| RID0002 | TID0002 | xx-xxxx-xxxx | (SOUND DATA) | (SOUND DATA) |
| | | | | |

FIG.4

| TERMINAL ID | CURRENT POSITION INFORMATION 1 | | | CURRENT POSITION INFORMATION 2 | | |
|---|---|---|---|---|---|---|
| | LATITUDE | LONGITUDE | TIME | LATITUDE | LONGITUDE | TIME |
| TID0001 | ×△○" | ××△" | 15:30 | ×△○" | ××△" | 15:31 |
| TID0002 | ×○△" | ××○" | 16:12 | ×○△" | ××○" | 16:13 |
| | | | | | | |

FIG.5

| DISTANCE BETWEEN TERMINALS [m] | SOUND VOLUME CONTROL VALUE |
|---|---|
| 0～10 | 100 |
| 10～20 | 90 |
| 20～30 | 80 |
| | |

FIG.6

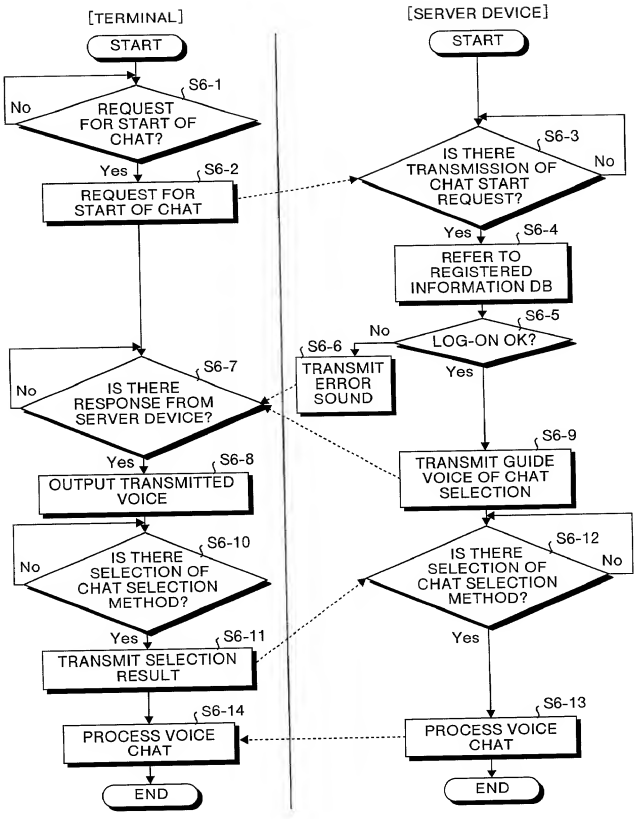

[TERMINAL]
[SERVER DEVICE]
START
START
S6-1
No
REQUEST FOR START OF CHAT?
Yes
S6-2
REQUEST FOR START OF CHAT
S6-3
IS THERE TRANSMISSION OF CHAT START REQUEST?
No
Yes
S6-4
REFER TO REGISTERED INFORMATION DB
S6-5
No
LOG-ON OK?
Yes
S6-6
TRANSMIT ERROR SOUND
S6-7
No
IS THERE RESPONSE FROM SERVER DEVICE?
Yes
S6-8
OUTPUT TRANSMITTED VOICE
S6-9
TRANSMIT GUIDE VOICE OF CHAT SELECTION
S6-10
No
IS THERE SELECTION OF CHAT SELECTION METHOD?
Yes
S6-11
TRANSMIT SELECTION RESULT
S6-12
IS THERE SELECTION OF CHAT SELECTION METHOD?
No
Yes
S6-13
PROCESS VOICE CHAT
S6-14
PROCESS VOICE CHAT
END
END

FIG.7

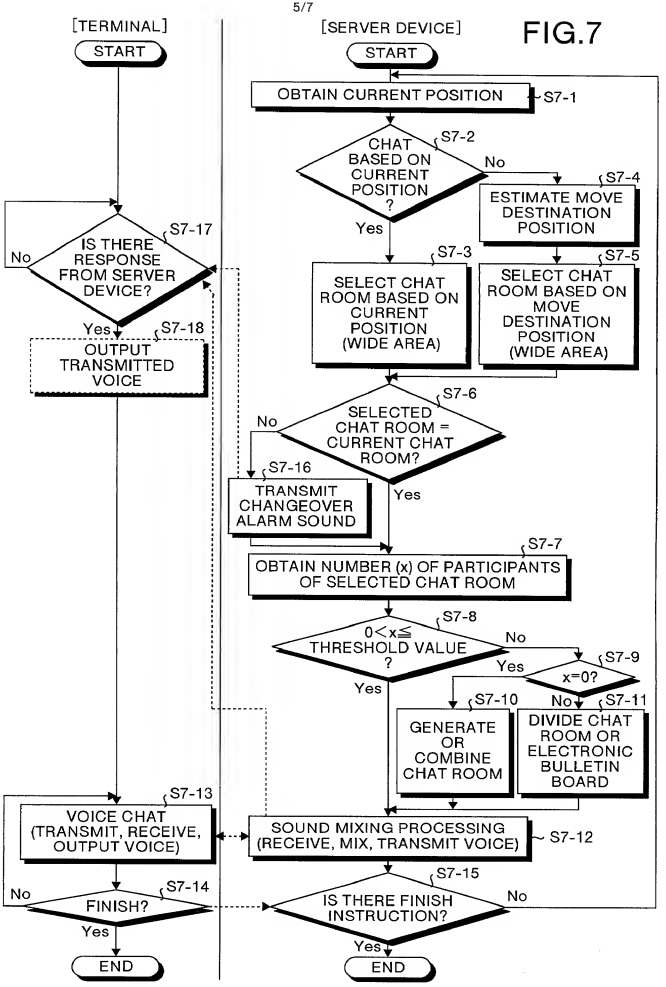

[TERMINAL]
[SERVER DEVICE]
START
START
OBTAIN CURRENT POSITION
S7-1
CHAT BASED ON CURRENT POSITION ?
S7-2
No
Yes
ESTIMATE MOVE DESTINATION POSITION
S7-4
SELECT CHAT ROOM BASED ON CURRENT POSITION (WIDE AREA)
S7-3
SELECT CHAT ROOM BASED ON MOVE DESTINATION POSITION (WIDE AREA)
S7-5
SELECTED CHAT ROOM = CURRENT CHAT ROOM?
S7-6
No
Yes
TRANSMIT CHANGEOVER ALARM SOUND
S7-16
OBTAIN NUMBER (x) OF PARTICIPANTS OF SELECTED CHAT ROOM
S7-7
0<x≦ THRESHOLD VALUE ?
S7-8
No
Yes
x=0?
S7-9
Yes
No
GENERATE OR COMBINE CHAT ROOM
S7-10
DIVIDE CHAT ROOM OR ELECTRONIC BULLETIN BOARD
S7-11
SOUND MIXING PROCESSING (RECEIVE, MIX, TRANSMIT VOICE)
S7-12
IS THERE FINISH INSTRUCTION?
S7-15
No
Yes
END
IS THERE RESPONSE FROM SERVER DEVICE?
S7-17
No
Yes
OUTPUT TRANSMITTED VOICE
S7-18
VOICE CHAT (TRANSMIT, RECEIVE, OUTPUT VOICE)
S7-13
FINISH?
S7-14
No
Yes
END

FIG.8

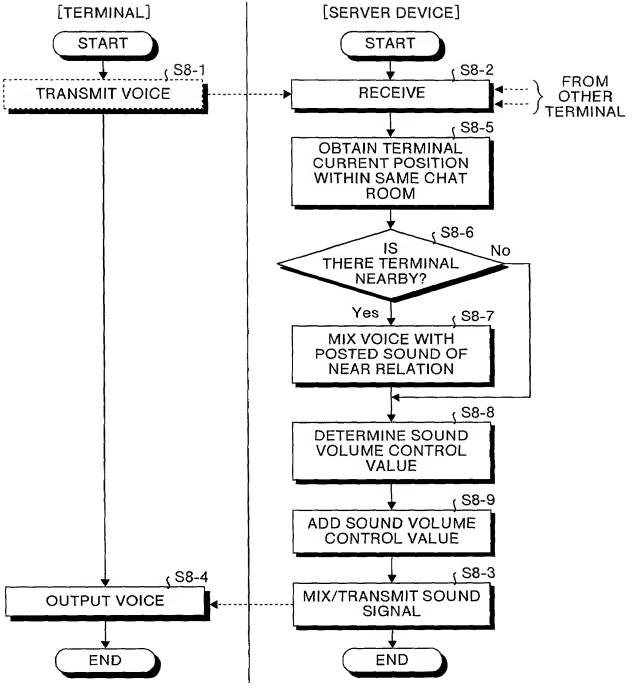
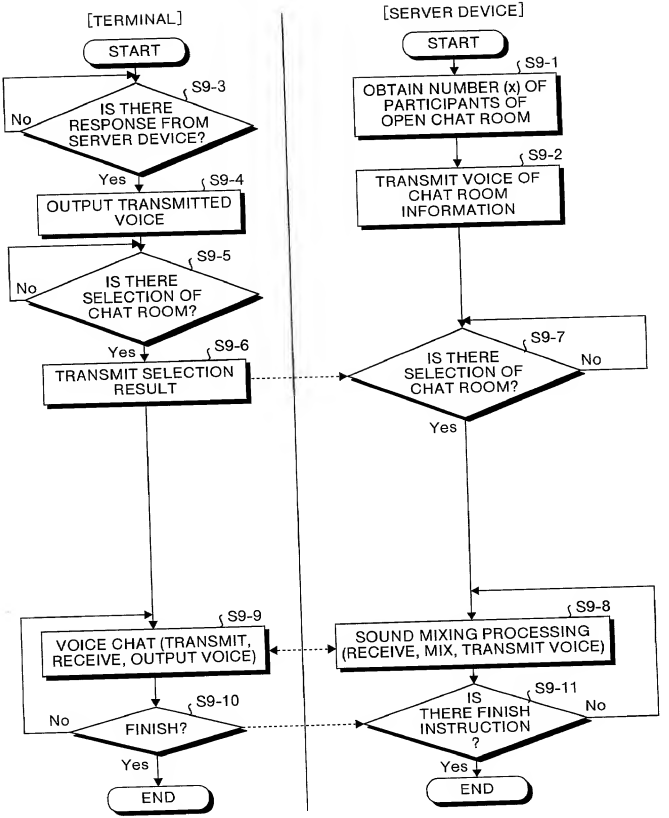

[TERMINAL]
[SERVER DEVICE]
START
START
S8-1
TRANSMIT VOICE
S8-2
RECEIVE
FROM OTHER TERMINAL
S8-5
OBTAIN TERMINAL CURRENT POSITION WITHIN SAME CHAT ROOM
S8-6
IS THERE TERMINAL NEARBY?
No
Yes
S8-7
MIX VOICE WITH POSTED SOUND OF NEAR RELATION
S8-8
DETERMINE SOUND VOLUME CONTROL VALUE
S8-9
ADD SOUND VOLUME CONTROL VALUE
S8-4
OUTPUT VOICE
S8-3
MIX/TRANSMIT SOUND SIGNAL
END
END

FIG.9


[TERMINAL]
START
S9-3
IS THERE RESPONSE FROM SERVER DEVICE?
No
Yes
S9-4
OUTPUT TRANSMITTED VOICE
S9-5
IS THERE SELECTION OF CHAT ROOM?
No
Yes
S9-6
TRANSMIT SELECTION RESULT
S9-9
VOICE CHAT (TRANSMIT, RECEIVE, OUTPUT VOICE)
S9-10
FINISH?
No
Yes
END
[SERVER DEVICE]
START
S9-1
OBTAIN NUMBER (x) OF PARTICIPANTS OF OPEN CHAT ROOM
S9-2
TRANSMIT VOICE OF CHAT ROOM INFORMATION
S9-7
IS THERE SELECTION OF CHAT ROOM?
No
Yes
S9-8
SOUND MIXING PROCESSING (RECEIVE, MIX, TRANSMIT VOICE)
S9-11
IS THERE FINISH INSTRUCTION ?
No
Yes
END